# Commonwealth of Virginia

## Department of Environmental Quality

# Solid Waste Managed in Virginia During Calendar Year 2004



June 2005 Revised

## **Table of Contents**

## Solid Waste Managed in Virginia During Calendar Year 2004

EXE	CUTIVE SUMMARY	i
I.	Introduction	1
II.	Reporting Procedures	1
III.	Receipt of Assessment Reports	2
IV.	Discussion of Reported Waste Management Activities	3
V.	Capacity Information	
VI.	Reports of Economic Benefits	5
Tabl	les	
	le 1 - Solid Waste Managed in Virginia - 2004 (in Tons)	
	le 2 - Jurisdiction of Origin of Waste Received - 2004 (in Tons)	
Tabl	le 3 - Summary of Available Capacity in Permitted Disposal Facilities – 2004 (in Tons)	8
Figu	ures	
	re 1 - Methods of Solid Waste Management – 2004 (in Tons)	
Figu	re 2 - Composition of the Solid Waste Stream – 2004 (in Tons)	. 10
	re 3 - Waste Received from Out-of-State Jurisdictions - 2004 (in Tons)	
	re 4 - Solid Waste Received From Virginia and Other Jurisdictions - 2004 (in Tons)	
	re 5 - Total Solid Waste Received From 1998 Through 2004	
Figu	re 6 - Municipal Solid Waste Received From 1998 Through 2004	. 14
Atta	chments	
Atta	chment 1 - Virginia Code § 10.1-1413.1 - Waste information and assessment program	. 15
	chment 2 - 9 Virginia Administrative Code 20-80-115 - Solid waste information and assessment program	
	chment 3 - 9 Virginia Administrative Code 20-130-165 - Waste information and assessment program	
	chment 4 - Reporting Table	
	chment 5 - Instructions for Completing Form DEQ 50-25 Solid Waste Information and Assessment Program Reporting Form	
	chment 6 - List of Facilities Reporting - 2004	
	chment 7 - Capacity/Disposal Rate Detail for Virginia Landfills - 2004 (in Tons)	
Atta	chment 8 – Data Provided by Facilities Regarding Economic Benefits	. 32

Revision – Attachment 8 and the associated text were added after the report was initially released. No other information in the report has changed.

## Solid Waste Managed in Virginia During Calendar Year 2004

#### EXECUTIVE SUMMARY

Section 10.1-1413.1 of the Code of Virginia requires the Department of Environmental Quality (Department) to prepare a report by June 30 of each year describing the amount of solid waste disposed of in the Commonwealth during the preceding calendar year. Facilities that have solid waste management permits are required to provide the Department with information to prepare this report. As of May 24, 2005, two hundred and four (204) permitted facilities provided information on their activities for calendar year 2004 for this report.

Based on the facilities' reports, a total of 27,076,352 tons of solid waste was received at Virginia's permitted solid waste management facilities during calendar year 2004. Of this total, 19,284,123 tons originated in the Commonwealth, and 7,792,229 tons originated from other jurisdictions.

Municipal solid waste (MSW) constituted 17,883,344 tons of the total amount of solid waste received during calendar year 2004. Of the total MSW received, 11,989,925 tons originated in the Commonwealth, and 5,893,419 tons originated from other jurisdictions.

Five jurisdictions accounted for 94.3% of all waste received from out-of-state sources: Maryland (42.3%); New York (24.0%); Washington, D.C. (16.4%); New Jersey (6.0%); and North Carolina (5.7%).

During calendar year 2004, the total solid waste, MSW, and construction/demolition/debris (CDD) received from out-of-state sources increased by 18.2%, 7.4%, and 180.0%, respectively, over 2003 amounts. For Virginia sources during the same period, the total solid waste, MSW, and CDD received increased by 3.8%, 7.1%, and 8.4% respectively, over 2003 amounts.

Of the solid waste managed in Virginia during the year, 81.6% - 18,299,529 tons - was landfilled, 9.3 % was incinerated, and the rest was managed by other means. Of all solid waste received at Virginia facilities during the year, 66.0 % was MSW, 19.0% was CDD waste, and the remainder was other types of waste.

Permitted solid waste management facilities reported that 5.4% of the waste that they managed was diverted from disposal by recycling or mulching. Most recycling, however, occurs at facilities other than permitted waste management facilities. Local governments provide more complete information on the recycling of waste generated in Virginia. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2003 was 30.3%. See <a href="http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf">http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf</a>. A report on the statewide recycling rate for calendar year 2004 will be issued later this year.

For the fourth year, permitted facilities were required to report on their available capacity and the expected life of the facilities based on current disposal rates. This information shows that at current rates the remaining available landfill capacity is as follows: MSW-16.1 years; CDD-7.0 years; non-captive industrial -35.0 years; and total -14.9 years. These projections do not account for population increases, changes in waste generation or disposal rates, or the closing of older MSW disposal units pursuant to statute.

The statute provides that, at the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located. Two facilities provided such information for calendar year 2004.

## Solid Waste Managed in Virginia During Calendar Year 2004

#### I. Introduction

This report has been prepared in accordance with Virginia Code § 10.1-1413.1, which requires the Department to prepare a report by June 30 of each year describing the amount of solid waste disposed of in the Commonwealth during the preceding calendar year (see Attachment 1). All permitted facilities (except for captive waste management facilities) that treat, store, or dispose of solid waste are required to provide the Department with information in their possession as is reasonably necessary for the Department to prepare this report. The statutory reporting requirements have been clarified and supplemented by regulation in 9 Virginia Administrative Code (VAC) 20-80-115 and 20-130-165 (Attachments 2 and 3).

### II. Reporting Procedures

For each category of solid waste, permitted solid waste facilities in Virginia were asked to report the amount of waste that they received, the method by which the waste was managed, the jurisdiction where the waste originated, if known, and the facility's remaining capacity. A copy of the reporting table and instructions for furnishing information to the Department are provided as Attachments 4 and 5, respectively.

The facilities identified amounts of solid waste by each of the following categories:

- municipal solid waste (MSW);
- construction/demolition/debris (CDD);
- industrial waste:
- regulated medical waste (RMW);
- vegetative and yard waste (VW/YW);
- incineration ash:
- sludge other than is land applied in accordance with Virginia Code § 32.1-164.5;
- tires:
- white goods (e.g., refrigerators, washing machines);
- friable asbestos;
- petroleum-contaminated soil (PCS); and
- other waste.

The facilities also reported on each of the following methods of waste management:

- recycled on-site;
- composted on-site;
- landfilled on-site;

- incinerated on-site:
- sent off-site to be recycled
- sent off-site to be treated, stored or disposed (TSD);
- stored on-site at the beginning of the reporting period;
- stored on-site at the end of the reporting period;
- mulched; and
- other.

The reporting table (Attachment 4) was modified this year to make it easier to use, to capture additional information on storage and diversion of waste, and to simplify information on the remaining facility capacity. The instructions for the form (Attachment 5) were similarly modified.

This report does not wholly represent Virginia's waste management activities, because the statute exempts all captive waste management facilities from the reporting requirements. A captive facility is one that is located on property owned or controlled by the generator of the waste. Most captive waste management facilities in Virginia are industrial landfills. As a result, the reported amounts of industrial waste and sludge represent only the portion that is managed in off-site facilities. Also, this report does not reflect tires managed under the Waste Tire Trust Fund at facilities that do not require a permit.

Permitted solid waste management facilities reported that 5.4% of the waste that they managed was diverted from disposal by recycling or mulching. Most recycling, however, occurs at facilities other than permitted waste management facilities. Local governments provide more complete information on the recycling of waste generated in Virginia. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2003 was 30.3%. See <a href="http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf">http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf</a>. A report on the statewide recycling rate for calendar year 2004 will be issued later this year.

### III. Receipt of Assessment Reports

By regulation, facilities must submit their reporting tables by March 31 of each year. Facilities are required to submit a separate reporting table for each jurisdiction from which they received waste. Information from reporting tables received on or before May 24, 2005, has been included in this report. Two hundred and four (204) facilities reported on their activities for calendar year 2004. Last year, two hundred and five (205) facilities reported on their activities for calendar year 2003. A list of the facilities reporting this year is provided as Attachment 6. These facilities submitted a total of 357 separate reporting tables, representing waste received from 28 states (including Virginia); Washington, D.C.; and Canada.

### IV. Discussion of Reported Waste Management Activities

Table 1 summarizes the quantities of waste that facilities received and managed during calendar year 2004, by waste type and waste management method. As shown in the table, 27,076,352 tons of solid waste was received at Virginia's permitted solid waste management facilities during calendar year 2004. Municipal solid waste (MSW) constituted 17,883,344 tons of the total amount of solid waste received.<sup>1</sup>

The column of Table 1 entitled "Landfilled" indicates the quantity of solid waste disposed of at permitted solid waste landfills in the Commonwealth during calendar year 2004. The amount of solid waste landfilled during the year was 18,299,529 tons. This was an increase of 9.8% from the 16,669,868 tons that was landfilled in calendar year 2003. The other columns of Table 1 indicate the quantity of waste managed by other methods. Columns were added to Table 1 this year for materials that were sent off-site for recycling and materials that were mulched to capture the diversion of these materials by permitted facilities. The column entitled "Mulched" indicates the quantity of clean wood wastes that were ground by permitted facilities in order to produce mulch (341,333 tons). The column entitled "Sent Off-Site to be Recycled" indicates the quantity of waste that was sent off site in calendar year 2004 from a permitted facility to be recycled elsewhere (489,304 tons).

Figure 1 shows the percentage of each method of solid waste management. Waste that was stored at the facilities at the beginning of the year (146,616 tons), and waste that was sent offsite for treatment, storage or disposal (5,193,402 tons) are not included in the basis for calculating percentages for Figure 1. Waste stored on-site at the beginning of the year is similar to waste received and is not considered a management method. Waste that was simply sent off site to another permitted Virginia facility for treatment storage or disposal would also be included in the receiving facility's reporting tables (i.e., if the waste is received at two, separate Virginia-permitted facilities, it may be counted twice as received waste). Based on the management methods included in Figure 1, the majority of solid waste managed in the Commonwealth during the year was landfilled on-site (81.6%) or incinerated (9.3%). Lesser amounts were reported as managed by recycling on-site and off-site (3.9%), other methods (2.5%), mulched (1.5%), composted on-site (0.7%), or stored on-site at the end of the year (0.4%).

Figure 2 shows the composition of the solid waste stream. Of all solid waste received at Virginia facilities in calendar year 2004, 66.0% was MSW, 19.0% was CDD waste, and the remainder was other types of waste. These include industrial waste (3.6%), incineration ash (3.4%), VW/YW (2.9%), "other waste" (2.7%), and sludge (1.2%).

<sup>&</sup>lt;sup>1</sup> When referring to information from Table 1, "waste received" refers to information from the first column, and "waste managed" refers to information from the remaining columns (except as noted). The amount of waste "received" for each type of waste may not match the sum of the reported amounts identified for each method of waste management. This reflects information as submitted by facilities in the reporting tables. In particular, incinerators may properly include the ash that they generate as waste that is "sent off site," and not include it as waste that is "received" at that facility.

<sup>&</sup>lt;sup>2</sup> Accounting for those two exceptions, the basis for these percentages of waste managed is 22,430,508 tons.

Table 2 shows the quantities of solid wastes imported from outside Virginia. Five jurisdictions accounted for 94.3% of all waste received from out-of-state sources: Maryland (42.3%); New York (24.0%); Washington, D.C. (16.4%); New Jersey (6.0%); and North Carolina (5.7%). Figure 3 illustrates the total quantity of waste received from individual jurisdictions.

Figure 4 compares the amount of waste received at facilities from out-of-state jurisdictions to the amount received from Virginia during calendar year 2004. Of the total amount of solid waste received (27,076,352 tons), 19,284,123 tons originated in the Commonwealth, and 7,792,229 tons originated from other jurisdictions. Thus, of all the waste received at Virginia facilities in 2004, 28.8% originated from other jurisdictions. Of the total MSW received (17,883,344 tons), 11,989,925 tons originated in the Commonwealth, and 5,893,419 tons originated from other jurisdictions. Of the total CDD received (5,140,419 tons), 3,835,227 tons originated in the Commonwealth, and 1,305,192 tons originated from other jurisdictions.

Figure 5 shows a comparison of total solid waste received in 1998 through 2004 for both Virginia and out-of-state sources. Figure 6 shows the same comparison for MSW. The total amount of solid waste received at facilities during 2004 increased 7.6% (1,906,630 tons) over 2003 amounts. For out-of-state sources during calendar year 2004, the total waste increased 18.2% (1,198,486 tons), MSW increased by 7.4% (404,249 tons), and CDD increased by 180.0% (838,988 tons) over 2003. For Virginia sources during the same period, the total solid waste, MSW, and CDD increased by 3.8% (708,144 tons), 7.1% (799,025 tons), and 8.4% (296,374 tons) respectively.

This report does not reflect the amount of solid waste exported from Virginia to other states. The Department regulates only the treatment, storage, and disposal of solid waste within the Commonwealth. Virginia facilities and waste generators are not required to submit information on the amount of solid waste exported to other states.

### V. Capacity Information

For the fourth year, landfills that treat, store, or dispose of solid waste were required to report on their available capacity and the expected life of the facilities at the current disposal rates. This information is summarized in Table 3 and detailed in Attachment 7. MSW landfills reported a total available capacity of 235,094,159 tons and a current disposal rate of 14,635,638 tons per year. Thus, at the current disposal rate, there would be 16.1 years of available MSW landfill capacity in the Commonwealth. However, this calculation does not account for population changes, changes in waste generation or disposal rates, or the closing of older MSW disposal units under Va. Code § 10.1-1413.2. Nor does it include facilities for which permits may have been issued, but that have not yet been built and are not accepting waste. Last year, it was reported that there were 18.3 years of remaining MSW disposal capacity.

<sup>&</sup>lt;sup>3</sup> Facilities reported available capacity in tons and in cubic yards. The available capacity has been estimated using the following conversion factors: 1000 lbs. of MSW = 1 cu. yd.; 1200 lbs. of CDD waste = 1 cu. yd.; and 1000 lbs. of industrial waste = 1 cu. yd. The available capacity for individual facilities may vary, depending on factors such as a facility's compaction rate and use of daily cover materials. The last column in Attachment 7 gives the reported remaining life as estimated by individual facilities.

CDD landfills reported a total available capacity of 22,854,893 tons and a current disposal rate of 3,259,211 tons per year. At the current disposal rate, there would be 7.0 years of available CDD landfill capacity in the Commonwealth. Last year, it was reported that there were 7.4 years of remaining CDD disposal capacity. For non-captive industrial landfills, there are 14,170,536 tons of available capacity and a current disposal rate of 404,680 tons per year (35.0 years). Last year, it was reported that there were 45.0 years remaining capacity for non-captive industrial facilities.

In total, there are 272,119,588 tons of available capacity and a current disposal rate of 18,299,529 tons per year (14.9 years). Last year, it was reported that there were 17.2 years remaining total capacity.

### VI. Reports of Economic Benefits

The statute provides that, at the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located. This may include the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year. Two facilities submitted reports of economic benefits for 2004. A summary of the reports is included as Attachment 8.

Table 1 - Solid Waste Managed in Virginia - 2004 (in Tons)

	Waste	Recycled	Composted	Landfilled	Incinerated	Sent Off- Site to be	Sent Off- Site to be	Stored On- Site Beginning	Stored On-Site End of		
Waste Type/Method	Received 4	On-Site 5	On-Site	On-Site	On-Site	Recycled	TSD	of Year	Year	Mulched	Other <sup>6</sup>
Municipal Solid Waste	17,883,343.83	0.00	0.00	11,530,986.66	2,078,170.37	76,630.78	4,194,142.67	7,022.36	11,661.00	0.00	988.35
Construction/Demolition/Debris	5,140,418.63	109,720.24	0.00	4,509,614.20	0.00	43,699.96	463,251.86	10,782.00	13,319.00	1,665.00	6,430.34
Industrial Waste	981,839.65	0.00	0.00	939,018.51	0.00	778.57	42,042.57	0.00	0.00	0.00	0.00
Regulated Medical Waste	23,171.19	0.00	0.00	0.00	7,682.03	0.00	3,502.40	0.00	0.00	0.00	11,986.76
Vegetative/Yard Waste	781,030.28	9,341.55	132,033.58	34,253.52	307.90	227,206.63	29,166.98	110,936.50	44,263.00	311,959.71	103,433.91
Incineration Ash	932,240.89	4,097.27	0.00	880,815.69	0.00	0.00	381,875.64	0.00	0.00	0.00	47,327.93
Sludge	315,157.34	5,370.90	10,237.17	297,138.27	0.00	394.00	2,411.00	0.00	0.00	0.00	0.00
Tires	74,265.57	18,971.41	0.00	9,280.44	0.00	13,236.26	22,661.06	487.54	934.30	0.00	9,667.64
White Goods	50,616.81	4,391.53	0.00	32.37	0.00	44,209.96	2,120.14	598.97	461.78	0.00	0.00
Friable Asbestos	9,395.32	0.00	0.00	9,375.44	0.00	0.00	19.89	0.00	0.00	0.00	0.00
Petroleum Contaminated Soil	144,048.66	62,642.93	0.00	45,757.76	0.00	22,679.00	11,474.97	5,395.00	6,889.00	0.00	0.00
Other Waste	740,823.88	175,946.12	19,122.14	43,256.23	4,113.82	60,469.16	40,732.46	11,393.49	12,368.22	27,708.65	388,461.22
Total	27,076,352.05	390,481.95	161,392.89	18,299,529.08	2,090,274.12	489,304.32	5,193,401.63	146,615.86	89,896.30	341,333.36	568,296.15

<sup>&</sup>lt;sup>4</sup> The amount of "Waste Received" and "Stored On-Site at the Beginning of the Year" may not precisely match the sum of the reported amounts for the remaining columns (i.e., each method of managing the waste). This difference reflects information submitted in the reporting tables. In particular, incineration ash generated by an energy recovery facility or incinerator may be listed as "sent off site to be treated, stored, or disposed" even though it was not "received" as ash at that facility. VW/YW may be composted to produce a product that is not managed as a waste.

<sup>&</sup>lt;sup>5</sup> The majority of recycling takes place at facilities that do not require a permit from the Department and were not required to submit data for this report. Therefore, the amounts shown in this column represent a substantial underestimate of the true recycling rate in the Commonwealth. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2003 was 30.3%. See <a href="http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf">http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf</a>. A report on the statewide recycling rate for calendar year 2004 will be issued later this year.

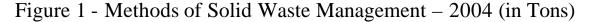
<sup>&</sup>lt;sup>6</sup> "Other" methods of management may include steam sterilization of medical waste, approved use of shredded tires at permitted facilities, and thermal treatment of PCS, among others.

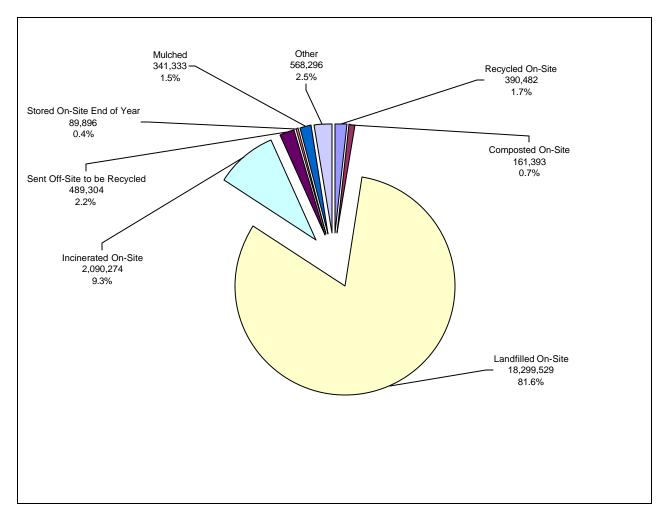
Table 2 - Jurisdiction of Origin of Waste Received - 2004 (in Tons)

State/Possession	MSW	CDD	Industrial	RMW	VW/YW	Incin. Ash	Sludge	Tires	White Goods	Friable Asbestos	PCS	Other	Total Received
Alabama			0.29									52.31	52.60
Arizona			34.09									18.91	53.00
California	1.71		14.29										16.00
Canada	117.47												117.47
Connecticut	161.00		36.67										197.67
Delaware	37,892.59		1,328.81	0.03			147.54						39,368.97
District of Columbia	1,195,438.32	35,488.71	221.37		127.04	4,625.11	4,984.22	393.61	45.34	4.08	26,381.25	8,586.96	1,276,296.01
Florida	1.00		19.94								0.08	0.69	21.71
Georgia	77.00		40.94								9.40		127.34
Illinois	41.00		13.65										54.65
Indiana	58.00		1.67										59.67
Kentucky											10.13		10.13
Maryland	2,032,053.21	882,699.05	35,650.27	3,065.50	9,319.74	204,474.21	62,531.80	3,739.02	88.11	42.80	12,339.45	49,676.08	3,295,679.24
Massachusetts	1,473.76		24.20	220.00									1,717.96
Minnesota	1.00										25.40		26.40
Mississippi	88.00		229.33									0.66	317.99
Nebraska											0.70		0.70
Nevada	1.00		328.67									3,294.75	3,624.42
New Hampshire			27.83										27.83
New Jersey	340,616.14	95,196.85	3,400.61				25,704.16				93.80	284.83	465,296.39
New York	1,778,021.28	1,533.19	65,114.56	870.50			21,120.36				27.14	104.52	1,866,791.55
North Carolina	429,133.32	1,988.06	8,871.31	551.20	29.00	24.55				1.75		9.18	440,608.36
Ohio	45.36		4.00									18.92	68.28
Pennsylvania	3,631.68	286,465.80	6,772.06	214.60								4,716.63	301,800.77
South Carolina	8.00		77.77								2,833.29		2,919.06
Tennessee	37,825.35	1,819.86	483.81		577.57			559.44			21.49	1,051.65	42,339.17
Texas	0.43		115.85										116.28
Utah	2.00		0.25										2.25
West Virginia	36,503.32		20.32	65.70			335.31	12.38			145.48		37,082.51
Misc.	227.10											17,207.15	17,434.25
Total for Other													
States	, ,	1,305,191.52	122,832.56	4,987.53	10,053.35	209,123.87	114,823.39	4,704.45	133.45	48.63	41,887.61	85,023.24	7,792,228.63
Total for Virginia	, ,	3,835,227.11	859,007.09	18,183.66	770,976.93	723,117.03	200,333.95	69,561.12	50,483.36	9,346.70	102,161.05	655,800.64	19,284,123.42
Total for all States	17,883,343.83	5,140,418.63	981,839.65	23,171.19	781,030.28	932,240.89	315,157.34	74,265.57	50,616.81	9,395.32	144,048.66	740,823.88	27,076,352.05

Table 3 - Summary of Available Capacity in Permitted Disposal Facilities -2004 (in Tons)

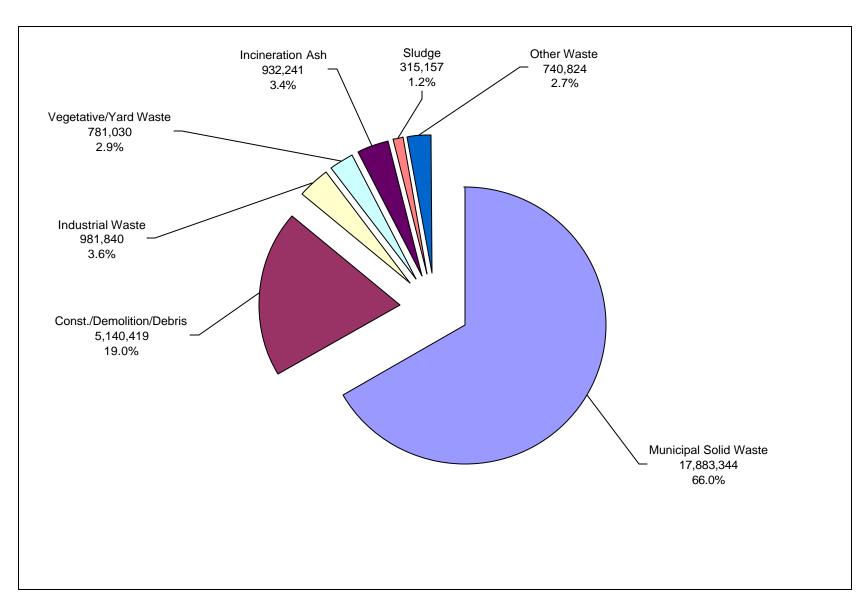
Facility Type	Reported Available	Reported Annual	Remaining
	Capacity on 12/31/04	Disposal Rate 2004	Permitted
			Capacity (Years)
MSW (Sanitary) Landfills	235,094,159	14,635,638	16.1
CDD Landfills	22,854,893	3,259,211	7.0
Non-Captive Industrial Landfills	14,170,536	404,680	35.0
Totals:	272,119,588	18,299,529	14.9





The basis for determining these percentages is the sum for all methods of waste management (recycled, composted, landfilled, etc.) in Table 1, with the exception of: (1) waste stored on-site at the beginning or the year (which is similar to waste received); and (2) waste that was sent off-site for treatment, storage or disposal (i.e., waste that was simply transferred to another facility for ultimate management). Accounting for those two exceptions, the basis for these percentages is 22,430,508 tons. Most recycling occurs at facilities other than permitted waste management facilities. As a result, more accurate recycling information is reported by localities. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2003 was 30.3%. See <a href="http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf">http://www.deq.virginia.gov/recycle/documents/RRRCY2003RPT.pdf</a>. A report on the statewide recycling rate for calendar year 2004 will be issued later this year.

Figure 2 - Composition of the Solid Waste Stream – 2004 (in Tons)



Note: This figure does not include waste streams comprising less than 1% of the total waste stream. This includes PCS (0.5%), Tires (0.3%), White Goods (0.2%), Regulated Medical Waste (<0.1%), and Friable Asbestos (<0.1%).

Figure 3 - Waste Received from Out-of-State Jurisdictions - 2004 (in Tons)

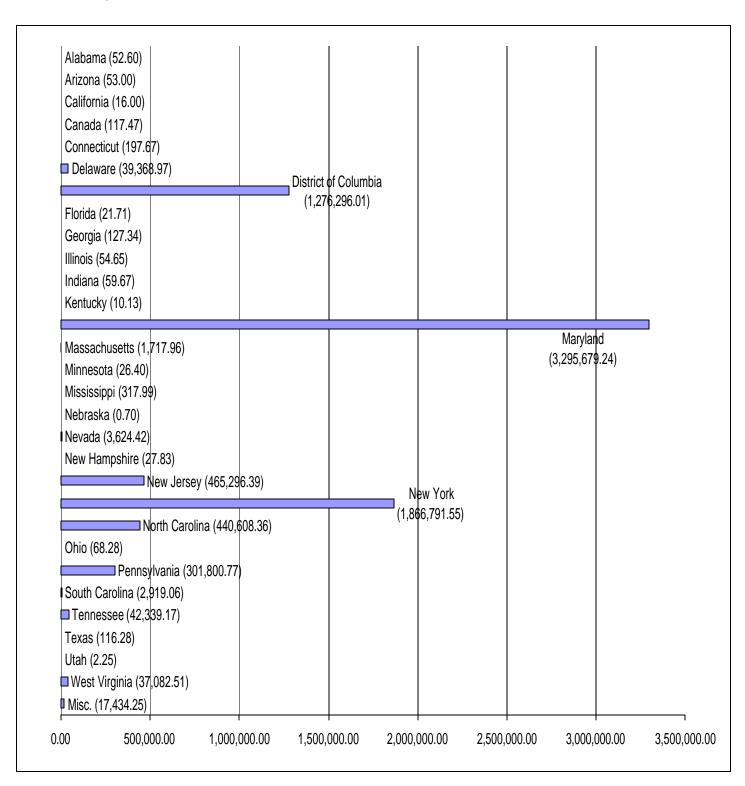


Figure 4 - Solid Waste Received From Virginia and Other Jurisdictions - 2004 (in Tons)

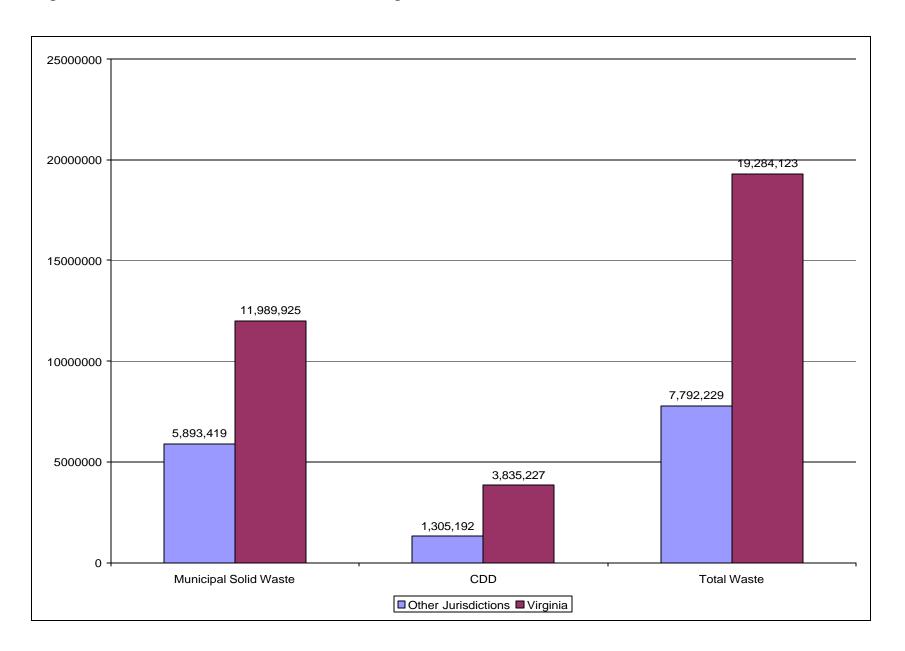


Figure 5 - Total Solid Waste Received From 1998 Through 2004

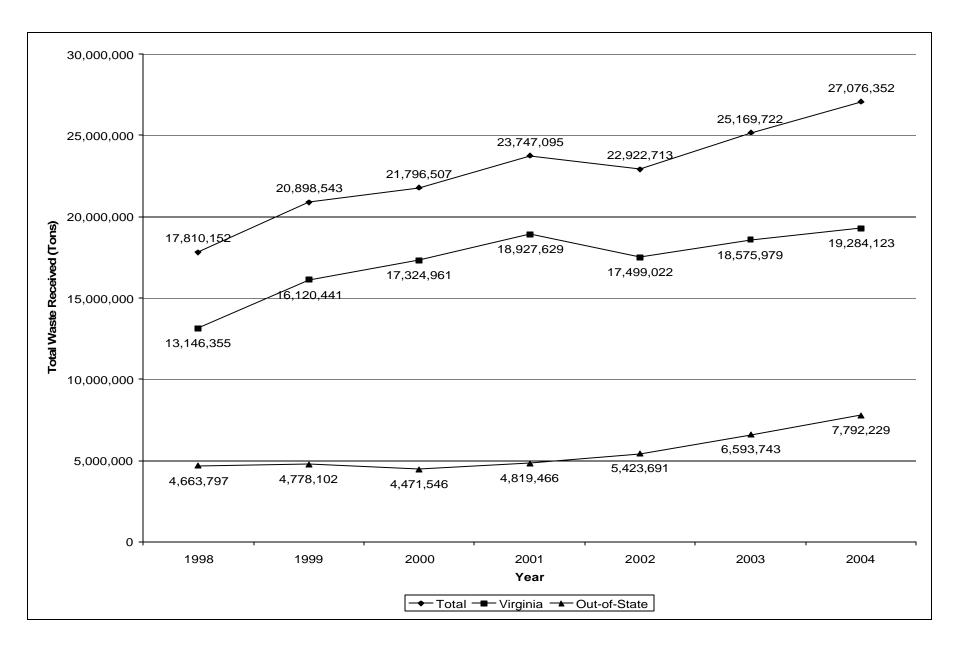
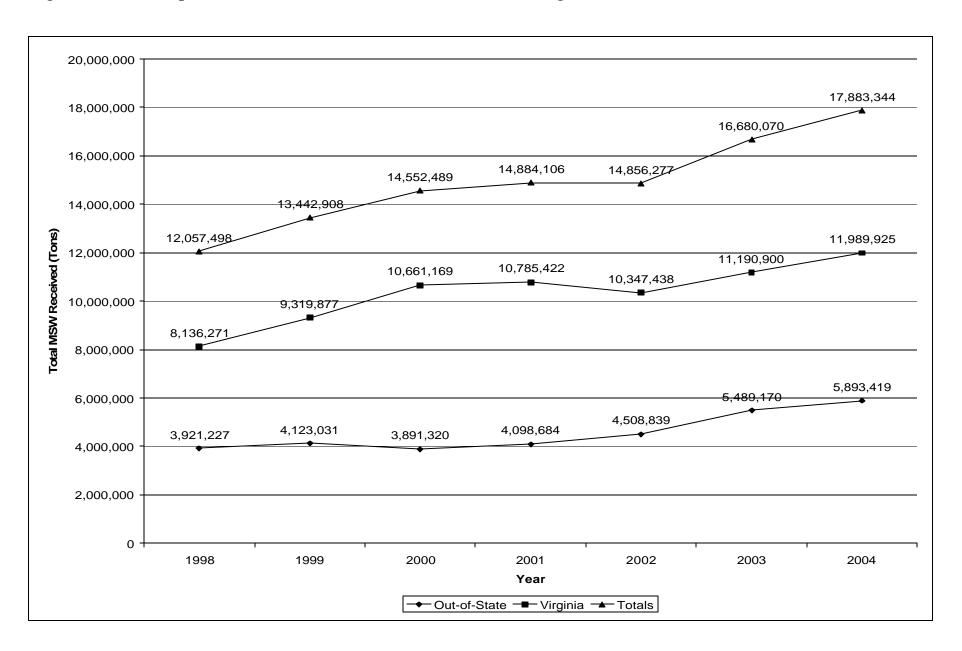


Figure 6 - Municipal Solid Waste Received From 1998 Through 2004



# Attachment 1 - Virginia Code § 10.1-1413.1 - Waste information and assessment program

A. The Department shall report by June 30 of each year the amount of solid waste, by weight or volume, disposed of in the Commonwealth during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) incinerator ash; (iv) sludge other than sludge that is land applied in accordance with § 32.1-164.5; and (v) tires. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the jurisdictions where such waste originated, if known. The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (i) recycling; (ii) composting; (iii) landfilling; and (iv) incineration.

B. All permitted facilities that treat, store or dispose of solid waste shall provide the Department not more than annually, upon request, with such information in their possession as is reasonably necessary to prepare the report required by this section. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in § 59.1-336.

C. This section shall not apply to captive waste management facilities.

# Attachment 2 - 9 Virginia Administrative Code 20-80-115 - Solid waste information and assessment program

A. The owners or operators of all permitted solid waste management facilities that treat, store, or dispose of solid waste shall report by March 31 of each year the amount of solid waste, by weight or volume, received and managed by the facility during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) industrial waste; (iv) regulated medical waste; (v) vegetative and yard waste; (vi) incinerator ash; (vii) sludge other than sludge that is land applied in accordance with § 32.1-164.5 of the Code of Virginia; (viii) tires; (ix) white goods; (x) friable asbestos; (xi) petroleum contaminated soil; and (xii) other special waste. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the state or local jurisdictions where such waste originated. The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (a) recycling; (b) composting; (c) landfilling; (d) incineration (e) sending off-site for further management; and (f) stored on site on December 31 of the reporting year.

Information on the available capacity and expected life of the facilities, at the disposal rates submitted in this subsection, shall be included in the annual report required by this section.

- B. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year.
- C. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in § 59.1- 336 of the Code of Virginia.
- D. The reporting form to be used to fulfill the reporting requirement of this part is Form DEQ 50-25 (Solid Waste Information and Assessment Program Reporting Table), which is also available in the Regulations for the Development of Solid Waste Management Plans (9 VAC 20-130).
- E. This section shall not apply to captive waste management facilities including captive industrial landfills.

# Attachment 3 - 9 Virginia Administrative Code 20-130-165 - Waste information and assessment program

A. The owners or operators of all permitted facilities that treat, store, or dispose of solid waste shall report by March 31 of each year the amount of solid waste, by weight or volume, received and managed in the Commonwealth during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) industrial waste; (iv) regulated medical waste; (v) vegetative and yard waste; (vi) incinerator ash; (vii) sludge other than sludge that is land applied in accordance with § 32.1-164.5 of the Code of Virginia; (viii) tires; (ix) white goods; (x) friable asbestos; (xi) petroleum contaminated soil; and (xii) other special waste. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the jurisdictions where such waste originated.

The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (i) recycling; (ii) composting; (iii) landfilling; (iv) incineration (v) sending off site for further management; and (vi) stored on site on December 31 of the reporting year. This section shall not apply to captive waste management facilities. The report is to be sent to the department regional office for the facility's location.

Information on the available capacity and expected life of the facilities at the disposal rates submitted in this subsection shall be included in the annual report required by this section.

- B. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year.
- C. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in §59.1-336 of the Code of Virginia.
- D. Every city, county and town in the Commonwealth, or solid waste management planning region approved pursuant to 9 VAC 20-130-180, shall submit to the department by April 30 of each year, the data and calculations required in 9 VAC 20-130-120 B and C.

## Attachment 4 - Reporting Table

#### SOLID WASTE INFORMATION AND ASSESSMENT PROGRAM REPORTING TABLE – FORM DEQ 50-25

													-			
1	Facility Name															
2	Permit Number				3	Date Submitt	ted to DE	ΞQ			4	4 Annual Re		od		
5	Preparer's Name									6 Preparer's Telephone Number						
7	Preparer's e-mail Ac	ddress						An e	e-mail addres	ss will only be	used to cor	itact you in c	ase of questi	ons about t	his form sub	mission
8	Has there been a change to the Annual Fee Billing Contact, Address or Telephone Number? Y N If so, please notify the DEQ Regional Office															
9	Remaining Permitte	d Capacit	у					cubi	cubic yards  If a facility's permitted capacity is reported in tons, please note this on the form.  DEQ will apply conversion factors based on the type of waste in order to calculate.							
10	Expected Remaining	g Permitte	d Life					year	rs	the volume a						
11	Originating Jurisdict	ion (NOTE	: Report ea	ach jurisdictio	on on	a separate pag	e)									
		Units (ch	neck one)				(Re			ement – Repor be consistent				∍.)		
	Waste Type	Tons Cu Yds	Total Amount	Recycled	Compo		Incinerated	Sent Of	Sent Off-Site to be: (f)		On-Site: g)	Other (h)				
			of Wast Receive (a)		On-Site On-S (b) (c)		On-Site (d)	On-Site (e)	Recycled	Treated, Stored, Disposed	Beginning of Reporting Period	End of Reporting Period	Mulched	Other Than Mulched		
12	Municipal Solid Waste												1 51154			
13	Construction/ Demolition/Debris															
14	Industrial Waste															
15	Regulated Medical Waste															
16	Vegetative/Yard Waste															
17	Incineration Ash															
18	Sludge															
19	Tires															
20	White Goods															
21	Friable Asbestos															
22	Petroleum Contaminated Soil															
23	Other Wastes (specify)															

See the Instructions for Completing Form DEQ 50-25 for definition of each of the above terms. For electronic submissions, go to the following link: <a href="http://www.deq.virginia.gov/waste/wasteinf.html">http://www.deq.virginia.gov/waste/wasteinf.html</a>.

Note: At the option of the facility owner, information can be provided concerning the facility's economic benefits to the locality where it is located.

24

Total

# Attachment 5 - Instructions for Completing Form DEQ 50-25 Solid Waste Information and Assessment Program Reporting Form

#### Solid Waste Information and Assessment (SWIA) Program Reporting Form

These instructions are designed to assist facilities with completing the required reporting form DEQ Form 50-25. A copy of each form submitted, including those submitted electronically, should be maintained in your facility files. The items are numbered to correspond to the numbered fields on Form DEQ 50-25.

#### **Electronic Submissions**

The on-line SWIA data entry form follows the same format and numbering system as the standard version of the form. After completing the on-line form click "save report". The report will automatically be e-mailed to the appropriate Department of Environmental Quality (DEQ) regional staff for review. If there are any questions concerning the data provided, staff will contact the preparer of the SWIA data form.

#### 1. Facility Name

Enter the name of the facility as it appears on the permit issued by the department.

#### 2. Permit Number

- Enter the permit number assigned to the facility by DEQ.
- Use a separate form(s) for each permit. For multiple permitted facilities, individual forms must be completed for each permitted facility.
- If a facility is being operated under permit-by-rule status, the letters PBR must precede the numbers (Example: PBR999).
- For other solid waste permits, the letters SWP (Example: SWP999) or for emergency permits, the letters EMG (Example: EMG999) should precede the numbers.

#### 3. Date submitted to DEQ

- Enter the date the facility sent the reporting form(s) to DEQ or submitted the on-line SWIA data entry form.
- All forms must be completed and sent by March 31 of each year for the waste managed during the preceding calendar year. This is referred to as the "reporting period".

#### 4. Annual Reporting Period

Enter the calendar year (reporting period) for which the data is being submitted (Example: 01/01/2004 through 12/31/2004).

#### 5. through 7. Preparer's Name, Telephone Number and E-Mail Address

This is the name, telephone number, and e-mail of the person responsible for preparing the DEQ Form 50-25. Your e-mail address will only be used if questions arise regarding the information provided on the form.

#### **8. Billing Information Change**

If there has been any change to the Annual Fee Billing Contact, Address, or Telephone Number that appeared on the fee bill received from the department the previous year, check the box and inform the Regional Office of the change. Forms will be developed to update billing contact information.

#### 9. Remaining Permitted Capacity

- Only required for landfills, all other facilities enter "N/A".
- Remaining Permitted Capacity means the space remaining in the landfill that is available for disposal as of December 31 of the reporting period.
- Remaining Permitted Capacity Calculation:

Remaining Permitted Capacity = [Volume specified in Part B Permit] – [Landfill volume already used]

- Report the capacity in cubic yards. If this information is reported in tons, DEQ will use simple conversion factors to obtain the capacity in cubic yards.
- Future proposed expansions not included in the approved Part B permit area may not be included in the capacity calculation. This information can also be obtained from the calculations performed to comply with air requirements found in 40 CFR Subpart WWW (40 CFR 60.750-60.759).

#### 10. Expected Remaining Permitted Life

Only required for landfills, all other facilities enter "N/A". Report the number of years of disposal capacity that is available based on the facility's site specific operating criteria.

**Waste Information -** This section reports the origin, types, and amounts of waste managed. Information must be provided concerning the originating jurisdiction of waste received. Amounts of waste can be entered in either tons or cubic yards as determined by the facility. For amounts reported in cubic yards, DEQ will use simple conversion factors to obtain estimated weights.

#### 11. Originating Jurisdiction (i.e. state, territory or country)

- Enter the jurisdiction from which the waste originated.
- For waste received from within Virginia (including waste from a Virginia transfer station), only one form must be completed.
- For waste received from outside Virginia, a separate form must be completed for each jurisdiction from which waste was received. A jurisdiction is either a state, territory, or country. (Example: If you receive waste from the state of New York, and/or New York City, the jurisdiction is "New York." Wastes received from Washington, D.C. and Puerto Rico, are all individual jurisdictions.)

\*\*Waste Types- Definitions found below are provided to assist facilities with completing Form DEQ 50-25. Specific definitions can be found in the Virginia Solid Waste Management Regulations (9 VAC 20-80-10, et seq.) and the Regulated Medical Waste Regulations (9 VAC 20-120-10 et seq.). Waste types are identified on separate rows of Form DEQ 50-25.

- **12. Municipal Solid Waste** means that waste which is normally composed of residential, commercial, and institutional solid waste and residues/ash derived from combustion/incineration of these wastes. *NOTE*: Paper and cardboard should be recorded in the row labeled "Municipal Solid Waste". Incinerated MSW must be reported as incinerator ash.
- **13. Construction/Demolition/Debris** means construction waste, demolition waste, and debris waste. These wastes must be recorded cumulatively in this row.
  - Construction waste means solid waste which is produced or generated during construction, remodeling, or repair of pavements, houses, commercial buildings, and other structures. Construction wastes include, but are not limited to lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, paving materials, and metal and plastics if the metal or plastics are a part of the materials of construction or empty containers for such materials. Paints, coatings, solvents, asbestos, any liquid compressed gases or semi-liquids and garbage are not construction wastes.
  - **Demolition waste** means that solid waste which is produced by the destruction of structures and their foundations and includes the same materials as construction wastes.
  - **Debris waste** means wastes resulting from land clearing operations. Debris wastes include, but are not limited to stumps, wood, brush, leaves, soil, and road spoils. *NOTE*: Concrete and asphalt should be recorded in the row labeled "Construction/Demolition/Debris".
- 14. Industrial Waste means any solid waste generated by manufacturing or industrial process that is not a regulated hazardous waste. Such waste may include, but is not limited to, waste resulting from the following

manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas wastes.

- **15. Regulated Medical Waste** means solid wastes so defined by the Regulated Medical Waste Management Regulations (9 VAC 20-120-10 et seq.) as promulgated by the Virginia Waste Management Board. Note: Regulated medical waste may not be disposed in a landfill.
- **16. Vegetative/Yard Waste** means vegetative waste and yard waste. These wastes must be recorded cumulatively in this row.
  - **Vegetative waste** means decomposable materials generated by yard and lawn care or land clearing activities and includes, but is not limited to, leaves, grass trimmings, woody wastes such as shrub and tree prunings, bark, limbs, roots, and stumps. For more detail see 9 VAC 20-101-10, et seq.
  - Yard waste means that fraction of municipal solid waste that consists of grass clippings, leaves, brush, and tree prunings arising from general landscape maintenance.
    - NOTE: Brush should be recorded in the row labeled Vegetative/Yard Waste category.
- **17. Incineration Ash** means fly ash or bottom ash residual waste material produced from incineration or burning of solid waste.
- **18. Sludge** means any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of treated effluent from a wastewater treatment plant. For the purposes of this form, the waste type "Sludge" excludes sludge land applied in accordance with Va. Code §32.1-164.
- **19. Tires** means a tire that has been discarded because it is no longer suitable for its original intended purpose because of wear, damage, or defect. (See 9 VAC 20-150- et seq. for other definitions dealing with the waste tire program.)
- **20.** White Goods means any stoves, washers, hot water heaters, and other large appliances.
- **21 Friable Asbestos** means any waste material containing more than 1% asbestos as determined using the polarized light microscopy methods specified in 40 CFR Part 763, Subpart F, Appendix A, Section 1, that, when dry, is capable of being crumbled, pulverized or reduced to powder by hand pressure.
- **22. Petroleum Contaminated Soil** means a soil that, as a result of a release or human usage, has absorbed or adsorbed only petroleum or petroleum by-products at concentrations above those consistent with nearby undisturbed soil or natural earth materials. Petroleum and petroleum by-products include, but are limited to diesel fuels, kerosene, gasoline, hydraulic fluids, jet engine fuel, and motor oil.
- **23. Other Waste** (**specify**) means any wastes that do not meet the previously defined waste types. A brief description of the waste must be provided in the field "Other Waste (specify)". Examples: Dirt and Soil, Inert waste, Rubber, Wood chips, Supplemental waste, etc. The on-line form allows for the entry of multiple "other wastes". For the purpose of the standard form, please total all other wastes and provide that number on this line of the form.
- **24. Total** means the total of the waste reported in that column of the table (Example: the total waste received, landfilled, incinerated etc.).
- \*\*Waste Management Different types of facilities manage waste in different ways. The reporting table contains rows to identify the types of wastes managed (see above). Columns are used to identify how the waste types were managed. In most cases, the amount of waste received should equal the sum of the amounts managed by the listed

methods (recycled, composted, landfilled, incinerated, sent off-site, etc.), except for waste stored on-site at the beginning of the reporting period. The following identifies the proper way to report how wastes were managed at your facility.

#### a) Total Amount of Waste Received

All waste that was received by the facility during the Annual Reporting Period must be reported in this column.

#### b) Recycled On-Site

Waste material that was removed from the incoming waste stream and processed into a raw material for a product must be reported on this column. Only consider items that are truly recycled, not reused. Recycled means "the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. Recycling shall not include processes that only involve size reduction." NOTE: Only report material that was both separated *AND* processed into a raw material at the facility. If the waste material was not separated *AND* processed, it may not be recorded as "recycled". (Example: Newspaper segregated from the waste stream and sent off-site to a processing facility for recycling should not be counted as recycled, by the reporting facility.) Other amounts may have been sent off-site for recycling or mulched, which are reported in different columns.

#### c) Composted On-Site

Waste that was stabilized on-site through a controlled aerobic decomposition process must be reported in this column. Not all waste types can be composted. Regulated medical waste, incineration ash, tires, white goods, asbestos, and petroleum-contaminated soil cannot be managed through composting. For compost facilities, only the volume that could not be composted and was sent off-site for disposal should be recorded as "sent off-site". Composted material is considered a product, not a waste, and does not have to be reported on this form.

#### d) Landfilled On-Site

Waste that was landfilled on-site must be reported in this column. Waste received at a facility that was later sent off-site for management through landfilling must not be reported in this column. Instead it must be reported in the "sent off-site to be: treated/stored/disposed" column. Example: Waste received at a transfer station that was later sent off-site to a landfill must be reported as "sent off-site to be: treated/stored/disposed". Regulated medical waste cannot be landfilled.

#### e) Incinerated On-Site

Waste that was incinerated on-site must be reported in this column. Waste received at the facility that was later sent off-site for incineration may not be reported in this column. Instead it must be reported in the "sent off-site to be: treated/stored/disposed" column. Example: Waste received at a transfer station that was sent off-site to an incinerator must be reported as "sent off-site to be: treated, stored, or disposed", not incinerated. NOTE: "Open Burning" is not the same as "Incineration". Waste that is open burned would be included in the "Other (other than mulched)" column.

#### f) Sent Off-Site to be:

Waste that was not treated, stored, or disposed of at the receiving facility but was instead sent off-site to another facility for management must be reported in this column. Example: Ash generated from an incinerator process sent off-site to be disposed must be listed in this column. The "sent off-site to be" column is divided into two subcolumns, "recycled" and "treated/stored/disposed". If waste is sent off-site for recycling (i.e., metals to be reclaimed or tires for shredding and use as fill), it would be reported in the "recycled" sub-column. If waste is sent off-site to be treated/stored/disposed it would be reported in the "treated/stored/disposed" sub-column. If waste is sent off-site for other that recycling, or treatment/storage/disposal, then the "other" sub-column would be used.

#### g) Stored On-Site

This column is also divided into two sub-columns: "beginning of reporting period" and "end of reporting period". Waste that was stored on-site as of January 1<sup>st</sup> of the reporting period is reported in the first sub-column. If no information is available please refer to the last year's Solid Waste Information Assessment form for this information. Waste that was remaining on-site at the end of the reporting period must be recorded in the second

sub-column. This does not include wastes that will remain on-site permanently, but includes wastes that are stored temporarily at the facility (i.e., white goods awaiting pickup by off-site metal recycler; regulated medical waste in storage awaiting treatment). The total amount of waste landfilled at a facility must not be listed in this column, instead it must be listed in the "landfilled" column.

#### h) Other Management

Wastes managed by methods other than those specified in the previous columns must be recorded in this column. A separate sub-column has been added for woody waste that has been mulched. Otherwise, this column must include a description of how the waste type was managed along with the amount of waste managed.

**Note:** At the option of the facility owner, the Code of Virginia allows for the submission of an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided at no cost or reduced cost, direct employment associated with the facility, and other economic benefits from the facility during the reporting period.

## Attachment 6 - List of Facilities Reporting - 2004

Facility Name	Darmit Number	Decienal Office*
Facility Name	Permit Number	Regional Office*
623 Landfill 623 Landfill	PBR009	PRO
	SWP506	PRO
Accomack County North Baler Facility	PBR112	TRO
Accomack County North Landfill	SWP461	TRO
Accomack County South Landfill	SWP091	TRO
Accomack County South Landfill Baler Facility	PBR090	TRO
AFETA Camp Peary	PBR097	TRO
Alleghany County (Island Ford Transfer Station)	PBR103	WCRO
American Waste Industries Inc.	PBR187	PRO
American Waste Industries Inc.	PBR114	TRO
American Waste Industries Inc.	SWP871	TRO
Amherst County Landfill	SWP563	SCRO
Appomattox County Materials Recovery Facility	PBR163	SCRO
Appomattox County Landfill	SWP086	SCRO
Aqua Clean Environmental of Virginia, LLC	PBR052	PRO
Arlington County Department of Human Services	PBR206	NVRO
Ashcake Road Landfill, Inc.	SWP574	PRO
Atlantic Waste Disposal Landfill	SWP562	PRO
Augusta Regional Landfill	SWP585	VRO
Bath County Transfer Station	PBR045	VRO
Battle Creek Landfill	SWP579	VRO
Bay Disposal Inc MRF	PBR504	TRO
Bedford County Sanitary Landfill	SWP560	WCRO
Bedford County Transfer Station	PBR031	WCRO
Bethel Landfill	SWP580	TRO
BFI Fredericksburg Recyclery	PBR107	NVRO
BFI Montross (Westmoreland) Transfer Station	PBR069	PRO
BFI Old Dominion Sanitary Landfill & Resource Management	SWP553	PRO
BFI Roanoke Valley Materials Recovery Facility	PBR105	WCRO
BFI Waste Systems of VA, LLC	SWP554	PRO
Blue Ridge Disposal Inc.	PBR104	WCRO
Boissevain Transfer	PBR004	SWRO
Botetourt County Landfill	SWP582	WCRO
Browning - Ferris Industries of South Atlantic Inc. Fluvanna Co	PBR099	VRO
Brunswick Waste Management Facility, LLC	SWP583	PRO
Buchanan County Transfer Station	PBR106	SWRO
Campbell County	SWP285	SCRO
Carroll Grayson Galax SW Authority	SWP508	SWRO
Cedar Bluff Transfer	PBR002	SWRO
Central Intelligence Agency - George Bush Center	PBR173	NVRO
Charles City County Sanitary Landfill	SWP531	PRO
City of Bristol Materials Recovery Facility for Scrap Tires	PBR116	SWRO
City of Bristol Sanitary Landfill	SWP498	SWRO
City of Bristol Virginia Incineration Facility	PBR074	SWRO
City of Bristol Virginia Michieration Facility  City of Bristol Virginia Quarry Balefill	SWP588	SWRO
City of Bristol Virginia Quarry Balefill  City of Bristol Virginia Solid Waste Transfer Station	PBR121	SWRO
·		
City of Bristol Virginia Yard Waste Composting Facility	PBR156	SWRO
City of Danville Compost Facility	PBR010	SCRO

Facility Nama	Permit Number	Pagional Office*
Facility Name City Of Harrisonburg	SWP390	Regional Office*
City of Newport News YW Composting	PBR096	TRO
		WCRO
City of Salem Transfer Station	PBR028 SWP398	
City of Virginia Beach Landfill No 2		TRO
Con Serv Industries, LFF	PBR102	NVRO
County South, LLC	SWP581	WCRO
Covanta Alexandra/Arlington Inc.	SWP435	NVRO
Covanta Fairfax Inc.	SWP510	NVRO
Cox's Charles City Road Landfill	SWP235	PRO
Cox's Darbytown Road Landfill	SWP525	PRO
Cox's Taylor Road Landfill	SWP270	PRO
Craig Co. Transfer Station	PBR508	WCRO
Craney Island Bioremediation Facility, Fleet and Industrial	PBR061	TRO
Craney Island Landfill	SWP041	TRO
Culpeper County Transfer Station	PBR140	NVRO
Danville Virginia Transfer Station	PBR015	SCRO
Department of Corrections/Powhatan Correctional Center	PBR175	PRO
Dickenson County Transfer Station	PBR049	SWRO
Dinwiddie County Transfer Station	PBR137	PRO
Elbow Enterprises Inc.	SWP305	TRO
Environmental Options Inc	PBR153	WCRO
Essex Transfer Station	PBR016	PRO
Fairfax County Health Department Laboratory	PBR246	NVRO
Fauquier County Landfill	SWP149	NVRO
Fauquier County Landfill	SWP575	NVRO
First Piedmont Corp	PBR196	SCRO
First Piedmont Corp	SWP065	SCRO
Floyd County Transfer Station	PBR050	WCRO
Fluvanna County Landfill	SWP429	VRO
Franklin County Landfill	SWP072	WCRO
Frederick County CDD Landfill	SWP591	VRO
Frederick County Sanitary Landfill	SWP529	VRO
Garner Tire Company	PBR127	WCRO
Greene Co. Material Recovery & Co. Composting Facility	SWP568	VRO
Greensville County Landfill	SWP405	PRO
Hampton NASA Steam Plant	SWP297	TRO
Hanover County Transfer Station	PBR189	PRO
Hanover County Yard Waste Composting Facility	PBR512	PRO
Harold Beasley Inc.	PBR198	SCRO
Henrico County - Springfield Road Landfill	SWP545	PRO
Higgerson Buchanan Inc.	SWP493	TRO
Hilltop Landfill	SWP326	NVRO
·		
Hopkins Road Transfer Station	PBR160	PRO
Hylton Site City of Bedford	SWP569	WCRO
I-66 Transfer Station	SWP387	NVRO
I-95 Landfill	SWP103	NVRO
Indian Trail Disposal Facility	SWP451	TRO
Industrial Resource Technologies	PBR115	PRO
INOVA Fairfax Hospital	PBR170	NVRO
Ivy Sanitary Landfill (Ivy, VA)	SWP125	VRO
Ivy Transfer Station (Ivy, VA)	PBR132	VRO
James City County Transfer Station	PBR021	TRO
John C. Holland Enterprise	SWP280	TRO

Facility Name	Permit Number	Regional Office*
Joint Public Service Authority of Wythe County and Blind Co.	PBR044	SWRO
King George Landfill, Inc	SWP586	NVRO
King William Transfer Station	PBR017	PRO
LCM Corporation Transfer Station	PBR136	WCRO
Lee County Transfer Station	PBR070	SWRO
Lorton Landfill	SWP331	NVRO
Loudoun Composting	PBR141	NVRO
Loudoun County Solid Waste Management Facility	SWP001	NVRO
Louisa County Sanitary Landfill	SWP194	NVRO
Lunenburg County Administration	SWP544	SCRO
Lynchburg's Sanitary Landfill	SWP558	SCRO
Madison County Transfer Station	PBR154	NVRO
Manassas Transfer Station	PBR091	NVRO
Maplewood Recycling and Waste Disposal Facility	SWP540	PRO
Martinsville Sanitary Landfill	SWP049	WCRO
Mathews Transfer Station	PBR018	PRO
Mecklenburg County Landfill	SWP014	SCRO
Merrifield Material Recovery Facility	PBR111	NVRO
Metalpro Inc.	PBR152	NVRO
Microbiotest, Inc	PBR505	NVRO
Middle Peninsula Landfill and Recycling Facility	PBR125	PRO
Middle Peninsula Landfill and Recycling Facility	SWP572	PRO
Middlesex Transfer Station	PBR019	PRO
Montgomery Regional Solid Waste Authority	PBR149	WCRO
Montgomery Regional Solid Waste Authority	PBR169	WCRO
MXI Environmental Services LLC	PBR180	SWRO
Naval Amphibious Base Little Creek Materials Recovery	PBR199	TRO
Nelson County Transfer Station	PBR051	VRO
·		WCRO
New River Solid Waste Management Area	SWP548	
Newport News Composting Facility No. 2	PBR110	TRO
Norfolk Naval Shipyard	PBR135	TRO
Northampton County Sanitary Landfill	SWP507	TRO
Nottoway County Sanitary Landfill	SWP304	SCRO
Old Dominion Material Recovery Facility	PBR006	NVRO
Old Dominion Metals Inc.	PBR062	TRO
Orange County Sanitary Landfill	SWP090	NVRO
Patrick County Solid Waste Transfer Station	PBR032	WCRO
Peters Mountain Landfill	SWP594	WCRO
Petersburg Sanitary Landfill	SWP228	PRO
Pittsylvania County Landfill	SWP571	SCRO
Port Weanack Solid Waste Receiving Facility	PBR507	PRO
Potomac Landfill Inc. MRF (AWRF)	PBR101	NVRO
Potomac Landfill, Inc	SWP441	NVRO
Prince Edward County Sanitary Landfill	SWP584	SCRO
Prince William County Sanitary Landfill	SWP029	NVRO
Prince William County Yard Waste Composing Facility	PBR030	NVRO
Purgo Inc.	PBR046	PRO
Qualla Road Landfill	SWP516	PRO
Rainwater Landfill	SWP327	NVRO
Rappahannock County Sanitary Landfill	SWP520	NVRO
Rappahannock Regional Solid Waste Management Board	SWP589	NVRO
Richmond City Parker Field Transfer Station	PBR515	PRO
Roanoke Transfer Station	SWP546	WCRO
•		-

Facility Name	Permit Number	Regional Office*
Rockbridge County Landfill	SWP075	VRO
Rockbridge County Baler	PBR071	VRO
Rockingham County Landfill	SWP062	VRO
Russell County Transfer Station	PBR001	SWRO
Scott County Landfill	SWP023	SWRO
Shenandoah County Landfill	SWP469	VRO
Shoosmith Sanitary Landfill	SWP587	PRO
Simons Darbytown Road Landfill	SWP524	PRO
· · · · · · · · · · · · · · · · · · ·	SWP555	WCRO
Smith Gap Regional Landfill Smyth County Transfer Station	PBR041	SWRO
Soilex Corporation	PBR075	TRO
Soilex Corporation	PBR155	TRO TRO
Soilex Corporation	PBR510	
South Boston Landfill Spetcylvania County Livingston Landfill No. 3	SWP031 SWP547	SCRO
Spotsylvania County - Livingston Landfill No. 2		NVRO
SPSA Boykins Transfer Station	SWP484	TRO
SPSA Chesapeake Transfer Station	PBR194	TRO
SPSA Composting Facility	PBR133	TRO
SPSA Franklin Transfer Station	PBR192	TRO
SPSA Isle of Wight Transfer Station	PBR193	TRO
SPSA Ivor Transfer Station	SWP539	TRO
SPSA Landstown Transfer Station	PBR191	TRO
SPSA Norfolk Transfer Station	PBR195	TRO
SPSA Oceana Transfer Station	PBR190	TRO
SPSA Power Plant	SWP482	TRO
SPSA Refuse Derived Fuel Plant (RDF)	SWP455	TRO
SPSA Regional Landfill	SWP417	TRO
SPSA Tire Processing Facility (TPF)	PBR072	TRO
SPSA Virginia Beach Yard Waste Facility	PBR024	TRO
Sterling Materials Recovery Facility - Waste Management	PBR093	NVRO
Superior Disposal Inc. Materials Recovery Facility	PBR516	PRO
T & L Disposal Inc.	SWP322	TRO
Tazewell County Landfill	SWP564	SWRO
Thomas Bros. Debris Landfill	SWP445	WCRO
Tidewater Transcyclery	PBR077	TRO
U.S. Army Garrison Fort Belvoir, Dewitt Army Hospital	PBR164	NVRO
VCU Health System (MCVH)	PBR174	PRO
Virginia Health Care Waste Transportation Inc.	PBR143	WCRO
Virginia Hospital Center	PBR178	NVRO
Virginia Materials Inc.	PBR117	TRO
Virginia Recycling Corporation	PBR039	PRO
VPPSA Compost Facility	PBR013	TRO
Warren County Transfer Station	PBR033	VRO
Washington County Virginia Solid Waste Transfer St	PBR003	SWRO
Waterway Recycling, LLC t/a Waterway Marine Terminal	PBR506	TRO
Watkins Nurseries Inc. Compost Division	PBR181	PRO
Wise County Bull Hill Transfer Station	PBR029	SWRO
Wise County Sanitary Landfill	SWP513	SWRO
Wolftrap Properties, LTD	SWP436	TRO
York County Transfer County	PBR022	TRO

\*Regional Offices

NVRO - Northern Virginia VRO - Valley

WCRO - West Central

PRO - Piedmont SCRO - South Central TRO - Tidewater SWRO - Southwest

Attachment 7 - Capacity/Disposal Rate Detail for Virginia Landfills - 2004 (in Tons)

Facility Name	Permit Number	Landfill Type	12/04 Cap. in Tons <sup>7</sup>	Landfilled in 2004 (Tons)	Reported Remaining Life (yr.)
		MOWALL			
	1	MSW Landfills		T	
Accomack County North Landfill	SWP461	MSW Landfill	270,067.25	24,658.00	12.80
Accomack County South Landfill	SWP091	MSW Landfill	178,071.50	26,565.00	6.10
Amherst County Landfill	SWP563	MSW Landfill	611,374.50	32,321.90	25.88
Appomattox County Landfill	SWP086	MSW Landfill	8,350.00	12,639.00	0.64
Atlantic Waste Disposal Landfill	SWP562	MSW Landfill	49,285,994.50	2,775,783.60	41.40
Augusta Regional Landfill	SWP585	MSW Landfill	414,144.00	132,945.71	3.12
Battle Creek Landfill	SWP579	MSW Landfill	910,657.00	53,990.96	0.00
Bedford County Sanitary Landfill	SWP560	MSW Landfill	165,790.50	42,349.00	4.80
Bethel Landfill	SWP580	MSW Landfill	26,180,000.00	609,143.12	50.00
BFI Old Dominion Sanitary Landfill & Resource Management	SWP553	MSW Landfill	1,850,000.00	897,702.61	3.70
BFI Waste Systems of VA, LLC	SWP554	MSW Landfill	14,500,000.00	1,005,534.88	25.00
Botetourt County Landfill	SWP582	MSW Landfill	185,900.00	24,529.00	3.20
Brunswick Waste Management Facility, LLC	SWP583	MSW Landfill	13,597,724.50	1,324,687.00	16.00
Campbell County	SWP285	MSW Landfill	1,878,990.85	47,575.38	37.99
Carroll Grayson Galax SW Authority	SWP508	MSW Landfill	218,000.00	103,417.00	4.20
Charles City County Sanitary Landfill	SWP531	MSW Landfill	16,103,996.00	576,637.94	24.30
City of Bristol Sanitary Landfill	SWP498	MSW Landfill	0.00	0.00	16.00
City of Bristol Virginia Quarry Balefill	SWP588	MSW Landfill	3,105,000.00	196,152.15	26.00
City of Virginia Beach Landfill No. 2	SWP398	MSW Landfill	2,291,932.00	47,650.20	56.00
Fauquier County Landfill	SWP149	MSW Landfill	226,650.00	162,670.00	1.50
Fauquier County Landfill	SWP575	MSW Landfill	926,600.00	91,595.00	18.50
Fluvanna County Landfill	SWP429	MSW Landfill	0.00	10,374.59	2.90
Franklin County Landfill	SWP072	MSW Landfill	305,387.50	58,447.00	5.50
Frederick County Sanitary Landfill	SWP529	MSW Landfill	5,358,051.50	148,155.00	44.00
Greensville County Landfill	SWP405	MSW Landfill	430,336.00	25,379.00	16.90
Henrico County - Springfield Road Landfill	SWP545	MSW Landfill	600,000.00	91,225.00	6.00
Hylton Site City of Bedford	SWP569	MSW Landfill	20,000.00	5,958.00	3.50
I-95 Landfill	SWP103	MSW Landfill	2,330,000.00	368,165.09	25.00
Ivy Sanitary Landfill	SWP125	Closed MSW Landfill	0.00	8,623.15	0.00
King George Landfill, Inc	SWP586	MSW Landfill	15,914,860.00	1,398,192.39	24.00
Loudoun County Solid Waste Management Facility	SWP001	MSW Landfill	11,650,000.00	75,761.00	60.00
Louisa County Sanitary Landfill	SWP194	MSW Landfill	650,000.00	26,493.00	9.00
Lunenburg County Administration	SWP544	MSW Landfill	302,500.00	13,541.27	8.00
Lynchburg's Sanitary Landfill	SWP558	MSW Landfill	1,214,606.00	172,968.00	7.02
Maplewood Recycling and Waste Disposal Facility	SWP540	MSW Landfill	19,283,183.50	373,039.13	84.80

-

<sup>&</sup>lt;sup>7</sup> Facilities reported available capacity in tons and cubic yards. The available capacity has been estimated using the following conversion factors: 1000 lbs. pounds of MSW = 1 cu. yd.; 1200 lbs. of CDD waste = 1 cu. yd.; and 1000 lbs of industrial waste = 1 cu. yd. The available capacity for individual facilities may vary, depending on factors such as the facilities' compaction rate and use of cover materials. The last column of this attachment gives the reported remaining life as estimated by the individual facilities.

					Reported
Facility Name	Permit Number	Landfill Type	12/04 Cap. in Tons <sup>7</sup>	Landfilled in 2004 (Tons)	Remaining Life (yr.)
Martinsville Sanitary Landfill	SWP049	MSW Landfill	37,495.50	87,846.00	1.00
Mecklenburg County Landfill	SWP014	MSW Landfill	70,000.00	45,354.00	2.90
Middle Peninsula Landfill and Recycling Facility	SWP572	MSW Landfill	20,044,716.00	563,242.49	62.20
New River Solid Waste Management Area	SWP548	MSW Landfill	466,157.00	177,868.00	4.00
Northampton County Sanitary					
Landfill	SWP507	MSW Landfill	17,000.00	13,572.00	1.25
Nottoway County Sanitary Landfill	SWP304	MSW Landfill	477,926.67	20,658.20	21.00
Orange County Sanitary Landfill	SWP090	MSW Landfill	357,364.00	26,742.17	8.00
Peters Mountain Landfill	SWP594	MSW Landfill	488,073.45	10,387.02	46.99
Petersburg Sanitary Landfill	SWP228	MSW Landfill	72,150.00	46,206.00	2.50
Pittsylvania County Landfill	SWP571	MSW Landfill	1,496,000.00	42,925.64	24.00
Prince Edward County Sanitary Landfill	SWP584	MSW Landfill	283,206.50	20,702.00	13.52
Prince William County Sanitary Landfill	SWP029	MSW Landfill	4,900,000.00	299,370.00	20.00
Rappahannock County Sanitary Landfill	SWP520	MSW Landfill	8,000.00	6,127.00	1.50
Rappahannock Regional Solid Waste Management Board	SWP589	MSW Landfill	234,514.00	166,622.00	1.00
Rockbridge County Landfill	SWP075	MSW Landfill	300,000.00	51,249.48	8.00
Rockingham County Landfill	SWP062	MSW Landfill	254,519.00	100,179.80	2.20
Scott County Landfill	SWP023	MSW Landfill	26,000.00	16,467.00	1.63
Shenandoah County Landfill	SWP469	MSW Landfill	1,900,000.00	49,294.00	38.00
Shoosmith Sanitary Landfill	SWP587	MSW Landfill	6,046,665.00	676,234.00	11.00
Smith Gap Regional Landfill	SWP555	MSW Landfill	4,337,988.50	137,656.00	34.67
South Boston Landfill	SWP031	MSW Landfill	187,904.38	54,075.78	2.75
Spotsylvania County - Livingston	0001	WOW Landin	107,004.00	04,070.70	2.70
Landfill No. 2	SWP547	MSW Landfill	1,063,500.00	53,408.43	18.00
SPSA Regional Landfill	SWP417	MSW Landfill	783,150.00	892,638.00	1.30
Tazewell County Landfill	SWP564	MSW Landfill	150,000.00	56,747.88	6.00
Wise County Sanitary Landfill	SWP513	MSW Landfill	123,662.33	55,196.14	2.00
Number of MSW (Sanitary)					
Landfills Reporting = 60		TOTALS	235,094,159.42	14,635,638.10	
Remaining MSW (Sanitary) Landfill	Capacity as of	12/2004 = 16.1 years	<b>S</b>		
	1	CDD Landfills		<u> </u>	
623 Landfill	SWP506	CDD Landfill	11,102,685.50	1,366,442.40	18.00
Ashcake Road Landfill, Inc.	SWP574	CDD Landfill	840,420.00	32,107.80	24.00
County South, LLC	SWP581	CDD Landfill	1,400,400.00	68,407.00	275.00
Cox's Darbytown Road Landfill	SWP525	CDD Landfill	110,260.00	32,031.00	3.50
Cox's Taylor Road Landfill	SWP270	CDD Landfill	360,582.50	36,050.00	9.00
Craney Island Landfill	SWP041	CDD Landfill	1,019,071.00	53,770.40	21.00
Elbow Enterprises Inc.	SWP305	CDD Landfill	0.00	0.00	0.00
Frederick County CDD Landfill	SWP591	CDD Landfill	2,143,606.00	45,471.00	57.00
Higgerson Buchanan Inc.	SWP493	CDD Landfill	346,060.00	261,394.20	3.00
Hilltop Landfill	SWP326	CDD Landfill	500,000.00	119,400.00	5.00

	Permit		12/04_Cap. in	Landfilled in	Reported Remaining
Facility Name	Number	Landfill Type	Tons <sup>7</sup>	2004 (Tons)	Life (yr.)
		Closed CDD			12
Indian Trail Disposal Facility	SWP451	Landfill	0.00	2,568.98	0.00
Lorton Landfill	SWP331	CDD Landfill	3,750,000.00	864,526.30	14.00
Potomac Landfill, Inc	SWP441	CDD Landfill	435,500.00	151,293.00	7.50
Qualla Road Landfill	SWP516	CDD Landfill	0.00	0.00	0.00
Rainwater Landfill	SWP327	CDD Landfill	785,921.50	99,261.00	11.25
Simons Darbytown Road Landfill	SWP524	CDD Landfill	5,000.00	56,291.40	0.10
T & L Disposal Inc.	SWP322	CDD Landfill	3,886.00	2,536.80	1.60
Thomas Bros. Debris Landfill	SWP445	CDD Landfill	1,500.00	0.00	2.00
Wolftrap Properties, LTD	SWP436	CDD Landfill	50,000.00	67,659.60	1.00
Number of CDD Landfills		Total	22 954 902 50	2 250 240 99	
Reporting = 19		Total	22,854,892.50	3,259,210.88	
Remaining CDD Landfill Capacity	as of 12/2004 -	7 N Years			
Remaining CDD Landin Capacity	u3 01 12/2004 =	1.0 16013			

65 Industrial Landfill	l 604,535.75		
	004,030.70	86,436.71	6.97
30 Industrial Landfill	13,566,000.00	318,243.40	65.00
Total	14,170,535.75	404,680.11	
apacity as of 12/2004 = 35	5.0 Years		
All Landfills			
Total	272,119,587.67	18,299,529.08	
	Total  Capacity as of 12/2004 = 35  All Landfills	Total 14,170,535.75  Capacity as of 12/2004 = 35.0 Years  All Landfills	Total 14,170,535.75 404,680.11 Capacity as of 12/2004 = 35.0 Years  All Landfills

## Attachment 8 – Data Provided by Facilities Regarding Economic Benefits

Virginia Code §10.1-1413.1.B. provides that facility owners may provide "an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year." Two facilities, Brunswick Waste Management Facility, LLC, and BFI Waste Systems of VA, LLC, submitted this information for 2004.

## Economic Benefit Data as reported by Brunswick Waste Management Facility, LLC Permit No. 583

For the year 2004, the Brunswick Waste Management Facility, LLC, reported the following benefits to Brunswick County:

- Host fee payments totaling \$2,169,743;
- Free Brunswick County disposal of 19,813 tons of waste worth \$693,455;
- Direct reimbursement of costs for the dedicated County landfill inspectors totaling in excess of \$120,000; and
- Direct provision of 60 full-time positions in Brunswick County (including landfill staff, Brunswick County inspectors, and full-time subcontractors).

## Economic Bene fit Data as reported by BFI Waste Systems of VA, LLC Permit No. 554

For the year 2004, BFI Waste Systems of VA, LLC, reported the following benefits to King and Queen County:

- Host fee payments of approximately \$4,000,000;
- Free King and Queen County solid waste disposal;
- Over an estimated \$6,000,000 in host fees, wages, and purchase of regional goods and services to the benefit of the Commonwealth of Virginia; and
- Direct provision of 25 full-time positions in King and Queen County and over 75 related positions in transportation, site maintenance, equipment maintenance, and professional services.